



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,803	12/30/2003	Hidenori Akita	CML01501JC	2114
20280	7590	06/14/2005	EXAMINER	
MOTOROLA INC 600 NORTH US HIGHWAY 45 ROOM AS437 LIBERTYVILLE, IL 60048-5343			JOSEPH, JAISON	
			ART UNIT	PAPER NUMBER
			2634	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/748,803

Applicant(s)

AKITA, HIDENORI

Examiner

Jaison Joseph

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Double Patenting

Claims 1 – 11 provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 – 11 of copending Application No. 10/743227. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being obvious over Baum et al. (US Patent 6,754,169 B2) in view of Ue et al (US Patent 6,597,894).

The applied reference has a common assignee with the instant application.
Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Regarding claim 1, Baum et al teach a method of estimating a Signal Interference Ratio of a pilot channel in MC-CDMA system having the steps of receiving a spread spectrum signal including a pilot channel and a plurality of data channel signals, despreading the pilot channel signal, determining the SIR for the SF and comparing the determined SIR with a predetermined threshold value. Baum et al failed to teach despreading the pilot channel using plurality of Spread Factors and selecting the SIR of the first SF that is below the predetermined threshold value (see column 2, lines 52 – 58). However Ue et al. teach despreading the pilot channel using a plurality of SF and selecting the SIR of the first SF that is below the predetermined threshold value (see figure 15). Therefore, it would be obvious to an ordinary skilled in the art at the time

Art Unit: 2634

the invention was made to use Ue et al.'s method in Baum et al's system to provide a radio communication apparatus and transmission rate control method capable of controlling transmission power of a base station directed to a mobile station appropriately without being affected by the environment of the mobile station or transmission rate (see column 1, line 60 – 65)..

Regarding claim 3, which inherits the limitations of claim 1, Baum et al. or Ue et al do not explicitly teach that dispreading the pilot channel with an $SF = 2^n$. However, it is well known in the art that most common spreading factors are 2^n power. It is just a matter of design choice to use the spreading factor as 2^n .

Regarding claim 4, which inherits then limitations of claim 1, further Ue et al. teach that performing adaptive modulation and coding and equalization using the elected estimated SIR (see figure 17).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baum et al. (US Patent 6,754,169 B2) in view of Ue et al (US Patent 6,597,894) as applied to claim 1 above, and further in view of Tigerstedt et al. (US Patent 6,615,044).

Regarding claim 5, which inherits the limitations of claim 1, Baum et al and Ue et do not disclose the predetermined threshold is between about 5dB and about 10dB. However, Tigerstedt et al teach method of estimating SIR of Pilot channel, wherein the threshold is between 2 and 5 dB or above 5 dB (see column 7, lines 52 – column 8, lines 2). Therefore it would be obvious to an ordinary skilled in the art at the time the invention was made to a threshold between about 5 dB and 10 dB to initiate the search

Art Unit: 2634

for an alternative network connection by starting the handover measurements (see abstract).

Claim 2, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baum et al. (US Patent 6,754,169 B2) in view of Ue et al (US Patent 6,597,894) as applied to claim 1 above, and further in view of Yanagi (USPAP US2002/0034216 A1).

Regarding claim 2, which inherits the limitations of claim 1, Baum et al and Ue et do not disclose storing the estimated SIRs in memory. However, Yanagi teaches calculating SIR and storing them in a memory (see abstract). Therefore it would be obvious to an ordinary skilled in the art at the time the invention was made to store the SIRs in memory to control transmission power from the estimated SIR value and the previous SIR value stored in the memory circuit (see abstract).

Regarding claim 6, the claimed method including the features corresponding to subject matter mentioned in above rejection of claim 2 is applicable hereto.

Regarding claim 7, which inherits the limitations of claim 6, the claimed apparatus including the features corresponding to subject matter mentioned in above rejection of claim 3 is applicable hereto.

Allowable Subject Matter

Claims 8 – 11 would be allowable if rewritten to overcome the double patenting rejection in above paragraph.

Art Unit: 2634


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison Joseph whose telephone number is (571) 272-6041. The examiner can normally be reached on M-F 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jaison Joseph
06/06/2005



STEPHEN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800